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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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7590

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EXAMINER

ELLINGTON, ALANDRA

ART UNIT

PAPER NUMBER

2855

DATE MAILED: 08/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/067,033

Applicant(s)

TROYER, TERRENCE J.

Examiner

Alandra N Ellington

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 and 28-30 is/are pending in the application.
- 4a) Of the above claim(s) 19-27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,3,6,14 and 28-30 is/are rejected.
- 7) ☐ Claim(s) 2,4,5,7-13 and 15-18 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 February 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-18 and 28-30, drawn to a pressure sensor for measuring fluid pressure, classified in class 73, subclass 715.
- II. Claims 19-27, drawn to a method of forming a pressure sensor, classified in class 29, subclass 590.

The inventions are distinct, each from the other because:

Inventions I and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product as claimed can be made by another and materially different process such as molding.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

During a telephone conversation with Jeffrey Gray on 5/17/03 a provisional election was made with traverse to prosecute the invention of I, claims 1-18 and 28-30. Affirmation of this election must be made by applicant in replying to this Office action. Claims 19-27 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

DETAILED ACTION

Drawings

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The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: "mounting arrangement 100" on pg. 5 of instant specification. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The abstract of the disclosure is objected to because it contains improper language such as "disposed". Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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Claims 1, 2, 6, 14, 28-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Yashara et al (4,158,311).

With respect to Claim 1, Yashara et al discloses a pressure sensor for measuring fluid pressure, said pressure sensor including:

A first body member 2,24 ({Figs. 1 and 2});

A second body member 3,25 ({Figs. 1 and 2}); and

A radially tensioned flexible diaphragm 8,23 disposed between said first body member 2,24 and said second body member 3,25, said first body member 2 and said diaphragm 8 forming a first fluid chamber 11, said second body member 3 and said diaphragm 8 forming a second fluid chamber 12 (col. 1 lines 23-25, 38-60 {Figs. 1 and 2});

Said first body member 2 being formed from a first material having a first coefficient of thermal expansion, said diaphragm 8 being formed from a second material having a second coefficient of thermal expansion, wherein said first coefficient of thermal expansion is not greater than said second coefficient of thermal expansion by more than approximately 0.0000015 inch/inch/°F (col. 2 lines 6-15).

With respect to Claim 3, Yashara et al discloses the pressure sensor of claim 1 wherein said second material that forms said diaphragm 23 comprises a precipitation hardening material (col. 3 lines 10-21).

With respect to Claim 6, Yashara et al discloses the pressure sensor of claim 1 wherein said first material that forms said first body member 24 is a precipitation hardening material (col. 3 lines 10-21, 65-68).

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With respect to Claim 14, Yashara et al discloses a pressure sensor for measuring fluid pressure, said pressure sensor including:

A first body member 24 ({Fig. 2});

A second body member 25 ({Fig. 2}); and

A radially tensioned flexible diaphragm 23 disposed between said first body member 24 and said second body member 25, said first body member 24 and said diaphragm 23 forming a first fluid chamber 11, said second body member 25 and said diaphragm 23 forming a second fluid chamber 12 ({Fig. 2});

Said first body member 24 and said second body member 25 being formed from a ferromagnetic material 6,7 such that said first and second body members 24,25 shield said diaphragm 23 from magnetic fields which may otherwise cause movement of said diaphragm 23 resulting in an inaccurate measurement of the fluid pressure applied to said diaphragm 23 (col. 3 lines 11-18).

With respect to Claim 28, Yashara et al discloses a pressure sensor for measuring fluid pressure, said pressure sensor including:

A first metal body member 24 and a second metal body member 25, said first and second body members being heat treated to greater than 900°F (col. 3 lines 51-53);

A flexible metal diaphragm 23 disposed between said first and second body members 24,25, said diaphragm 23 being formed from a precipitation hardening material, said first body member 24 and said diaphragm 23 forming a first fluid chamber 11, and said second body member 25 and said diaphragm 23 forming a second fluid chamber 12 (col. 1 lines 23-25, 38-60 {Figs. 1 and 2}).

With respect to Claim 29, Yashara et al discloses the pressure sensor of claim 28 wherein said diaphragm 23 is in an annealed condition (col. 3 lines 47-62).

With respect to Claim 30, Yashara et al discloses the pressure sensor of claim 28 wherein said diaphragm is heat treated to approximately 900°F (col. 3 lines 47-53).

Allowable Subject Matter

Claims 2, 4, 5, 7-13 and 15-18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

A. Lee et al (4,358,814) discloses a capacitive pressure sensor.

B. Rick (3,800,413) discloses a differential pressure transducer.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alandra N. Ellington whose telephone number is (703)305-4449. The examiner can normally be reached on Monday - Friday, 6:30am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz can be reached on (703)305-4816. The fax phone numbers for the organization where this application or proceeding is assigned are (703)308-7382 for regular communications and (703)305-3839 for After Final communications.


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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.

Alandra Ellington
Art Unit 2855



ane
July 28, 2003



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